LU 6039 (US)



# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellants: Ulrich DAHN et al.	)	
Application Number: 10/522,082	)	Group Art Unit: 1796
Filed: January 21, 2005	)	Examiner: Nathan M. Nutter
For AT LEAST TWO-STAGE PROCESS	)	
FOR PREPARING PROPYLENE	)	
POLYMER COMPOSITIONS	)	

Honorable Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

## APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Sir:

Please enter the following Brief in response to the Final Office Action mailed January 5, 2010. Appellants filed a Notice of Appeal on April 5, 2010. The Office has been authorized to charge Deposit Account No. 08-2336 for the requisite fee for this Brief.

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#### I. REAL PARTY IN INTEREST

The real party in interest is Basell Polyolefine GmbH, which is the assignee of record of the present application and which is a company organized and existing under the laws of Germany.

#### II. RELATED APPEALS AND INTERFERENCES

There are no other prior or pending appeals, interferences, or judicial proceedings known to Appellants, Appellants' legal representative, or the assignee which may relate to, directly affect, or be directly affected by or have a bearing on the Board's decision in this appeal.

#### III. STATUS OF CLAIMS

Claims 1, 2, 4, 5, 8, 10-12 and 14-19 stand rejected and are being appealed.

#### IV. STATUS OF AMENDMENTS

No amendments were presented to the claims after final rejection.

#### V. SUMMARY OF CLAIMED SUBJECT MATTER

In independent claim 1, Appellants are currently claiming a process for preparing a propylene polymer composition in an at least two-stage process, wherein, in a first polymerization stage, a propylene homopolymer is prepared by polymerization, and in a second polymerization stage, ethylene and propylene are polymerized to give an ethylene/propylene copolymer comprising more than 97% to 99.5% by weight of ethylene. The amount of the ethylene/propylene copolymer in the propylene polymer composition ranges from 10 to 50% by weight, and the propylene polymer composition comprises a melt flow rate, MFR, from 2 to 50

g/10 min. in accordance with ISO 1133 at 230°C and 2.16 kg. (Appl., p. 3, line 13 to p. 4, line 11)

Claim 2 depends upon claim 1 and further specifies that the propylene homopolymer prepared in the first polymerization stage comprises a melt flow rate, MFR, from 5 to 150 g/10 min. in accordance with ISO 1133 at 230°C and 2.16 kg. (Appl., p. 12, lines 23-28)

Claim 3 is cancelled.

Claim 4 depends upon claim 1 and further specifies that both the first and the second polymerization stages are carried out in gas phase. (Appl., p. 10, lines 27-33)

Claim 5 depends upon claim 4 and further specifies that in the first polymerization stage the polymerization is carried out at a pressure from 10 to 50 bar and a temperature from 50 to 100°C, in presence of a polymerization-active catalyst system. The propylene homopolymer obtained in the first polymerization stage together with the catalyst system is introduced into an intermediate vessel, depressurized to less than 5 bar for from 0.01 to 5 minutes and the pressure in the intermediate vessel is then increased from 5 to 60 bar by injection of a gas mixture whose composition differs from the composition of the gas mixture of the first polymerization stage. The propylene homopolymer together with the catalyst is subsequently transferred to the second polymerization stage and further polymerized at a pressure from 10 to 50 bar and a temperature from 50 to 100°C. (Appl., p. 11, line 6 to p. 12, line 8)

Claims 6 and 7 are cancelled.

In independent claim 8, Applicants are currently claiming a process for preparing a polymer composition comprising (1) preparing a propylene polymer composition in an at least two-stage process, wherein, in a first polymerization stage, a propylene homopolymer is prepared by polymerization, and in a second polymerization stage, ethylene and propylene are

polymerized to give an ethylene/propylene copolymer comprising more than 97% to 99.5% by weight of ethylene, wherein the amount of the ethylene/propylene copolymer in the propylene polymer composition ranges from 10 to 50% by weight, and the propylene polymer composition comprises a melt flow rate, MFR, from 2 to 50 g/10 min. in accordance with ISO 1133 at 230°C and 2.16 kg; and (2) subsequently mixing an ethylene-C<sub>3</sub>-C<sub>10</sub>-1-alkene copolymer comprising a crystallinity lower than the ethylene/propylene copolymer formed in the second polymerization stage. (Appl., p. 3, line 13 to p. 4, line 11; and p. 13, lines 8 to 20)

Claim 9 is cancelled.

In independent claim 10, Applicants are currently claiming a propylene polymer composition obtained by an at least two-stage process, wherein, in a first polymerization stage, a propylene homopolymer is prepared by polymerization, and in a second polymerization stage, ethylene and propylene are polymerized to give an ethylene/propylene copolymer comprising more than 97% to 99.5% by weight of ethylene. The amount of the ethylene/propylene copolymer in the propylene polymer composition ranges from 10 to 50% by weight, and the propylene polymer composition comprises a melt flow rate, MFR, from 2 to 50 g/10 min. in accordance with ISO 1133 at 230°C and 2.16 kg. (Appl., p. 3, line 13 to p. 4, line 11)

In independent claim 11, Applicants are currently claiming a method for producing films, fibers or moldings comprising extruding or molding a propylene polymer composition to form the films, fibers or moldings, the propylene polymer composition obtained by an at least two-stage process, wherein, in a first polymerization stage, a propylene homopolymer is prepared by polymerization, and in a second polymerization stage, ethylene and propylene are polymerized to give an ethylene/propylene copolymer comprising more than 97% to 99.5% by weight of ethylene. The amount of the ethylene/propylene copolymer in the propylene polymer

composition ranges from 10 to 50% by weight, and the propylene polymer composition comprises a melt flow rate, MFR, from 2 to 50 g/10 min. in accordance with ISO 1133 at 230°C and 2.16 kg. (Appl., p. 3, line 13 to p. 4, line 11; and p. 14, lines 3-4)

In independent claim 12, Applicants are currently claiming a film, fiber or molding comprising a propylene polymer composition, the propylene polymer composition obtained by a process, wherein, the process comprises at least two-stages, and in a first polymerization stage, a propylene homopolymer is prepared by polymerization, and in a second polymerization stage, ethylene and propylene are polymerized to give an ethylene/propylene copolymer comprising more than 97% to 99.5% by weight of ethylene. The amount of the ethylene/propylene copolymer in the propylene polymer composition ranges from 10 to 50% by weight, and the propylene polymer composition comprises a melt flow rate, MFR, from 2 to 50 g/10 min in accordance with ISO 1133 at 230°C and 2.16 kg. (Appl., p. 3, line 13 to p. 4, line 11; and p. 14, lines 3-4)

#### Claim 13 is cancelled.

In independent claim 14, Applicants are currently claiming a propylene polymer composition obtained by a process comprising (1) preparing a propylene polymer composition in an at least two-stage process, wherein, in a first polymerization stage, a propylene homopolymer is prepared by polymerization, and in a second polymerization stage, ethylene and propylene are polymerized to give an ethylene/propylene copolymer comprising more than 97% to 99.5% by weight of ethylene, wherein the amount of the ethylene/propylene copolymer in the propylene polymer composition ranges from 10 to 50% by weight, and the propylene polymer composition comprises a melt flow rate, MFR, from 2 to 50 g/10 min. in accordance with ISO 1133 at 230°C and 2.16 kg; and (2) subsequently mixing an ethylene-C<sub>3</sub>-C<sub>10</sub>-1-alkene copolymer comprising a

crystallinity lower than the ethylene/propylene copolymer formed in the second polymerization stage. (Appl., p. 3, line 13, to p. 4, line 11; and p. 13, lines 8-20)

In independent claim 15, Applicants are currently claiming a film, fiber or molding comprising a propylene polymer composition obtained by a process comprising (1) preparing a propylene polymer composition in an at least two-stage process, wherein, in a first polymerization stage, a propylene homopolymer is prepared by polymerization, and in a second polymerization stage, ethylene and propylene are polymerized to give an ethylene/propylene copolymer comprising more than 97% to 99.5% by weight of ethylene, wherein the amount of the ethylene/propylene copolymer in the propylene polymer composition ranges from 10 to 50% by weight, and the propylene polymer composition comprising a melt flow rate, MFR, from 2 to 50 g/10 min. in accordance with ISO 1133 at 230°C and 2.16 kg; and (2) subsequently mixing an ethylene-C<sub>3</sub>-C<sub>10</sub>-1-alkene copolymer comprising crystallinity lower than the ethylene/propylene copolymer formed in the second polymerization stage. (Appl., p. 3, line 13 to p. 4, line 11; p. 13, lines 8-20; and p. 14, lines 3-4)

In independent claim 16, Applicants are currently claiming a process for preparing a propylene polymer composition in a two-stage process, wherein, in a first polymerization stage, a propylene homopolymer is prepared by polymerization, and in a second polymerization stage, ethylene and propylene are polymerized to give an ethylene/propylene copolymer comprising from 95% to 99.5% by weight of ethylene. The amount of the ethylene/propylene copolymer in the propylene polymer composition ranges from 10 to 50% by weight, and the propylene polymer composition comprises a melt flow rate, MFR, from 2 to 50 g/10 min. in accordance with ISO 1133 at 230°C and 2.16 kg, and the propylene polymer composition consists essentially

of the propylene homopolymer and the ethylene/propylene copolymer. (Appl., p. 3, line 13 to p. 4, line 11)

In independent claim 17, Applicants are currently claiming a process for preparing a polymer composition comprising: (1) preparing a propylene polymer composition in a two-stage process, wherein, in a first polymerization stage, a propylene homopolymer is prepared by polymerization, and in a second polymerization stage, ethylene and propylene are polymerized to give an ethylene/propylene copolymer comprising from 95% to 99.5% by weight of ethylene, wherein the amount of the ethylene/propylene copolymer in the propylene polymer composition ranges from 10 to 50% by weight, and the propylene polymer composition comprises a melt flow rate, MFR, from 2 to 50 g/10 min. in accordance with ISO 1133 at 230°C and 2.16 kg; and (2) subsequently mixing an ethylene-C<sub>3</sub>-C<sub>10</sub>-1-alkene copolymer comprising a crystallinity lower than the ethylene/propylene copolymer formed in the second polymerization stage, wherein the polymer composition consists essentially of the propylene homopolymer, the ethylene/propylene copolymer, and the ethylene-C<sub>3</sub>-C<sub>10</sub>-1-alkene copolymer. (Appl., p. 3, line 13 to p. 4, line 11; and p. 13, lines 8-20)

In independent claim 18, Applicants are currently claiming a propylene polymer composition obtained by a two-stage process, wherein, in a first polymerization stage, a propylene homopolymer is prepared by polymerization, and in a second polymerization stage, ethylene and propylene are polymerized to give an ethylene/propylene copolymer comprising from 95% to 99.5% by weight of ethylene. The amount of the ethylene/propylene copolymer in the propylene polymer composition ranges from 10 to 50% by weight, and the propylene polymer composition comprises a melt flow rate, MFR, from 2 to 50 g/10 min. in accordance with ISO 1133 at 230°C and 2.16 kg, and the propylene polymer composition consists essentially

of the propylene homopolymer and the ethylene/propylene copolymer. (Appl., p. 3, line 13 to p. 4, line 11).

In independent claim 19, Applicants are currently claiming a propylene polymer composition obtained by a process comprising: (1) preparing a propylene polymer composition in an at least two-stage process, wherein, in a first polymerization stage, a propylene homopolymer is prepared by polymerization, and in a second polymerization stage, ethylene and propylene are polymerized to give an ethylene/propylene copolymer comprising from 95% to 99.5% by weight of ethylene, wherein the amount of the ethylene/propylene copolymer in the propylene polymer composition ranges from 10 to 50% by weight, and the propylene polymer composition comprises a melt flow rate, MFR, from 2 to 50 g/10 min. in accordance with ISO 1133 at 230°C and 2.16 kg; and (2) subsequently mixing an ethylene-C<sub>3</sub>-C<sub>10</sub>-1-alkene copolymer comprising a crystallinity lower than the ethylene/propylene copolymer formed in the second polymerization stage, wherein the polymer composition consists essentially of the propylene homopolymer, the ethylene/propylene copolymer, and the ethylene-C<sub>3</sub>-C<sub>10</sub>-1-alkene copolymer. (Appl., p. 3, line 13 to page 4, line 11; and p. 13, lines 8-20)

#### VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- (A) Whether claims 1, 2, 4, 5, 8, 10-12, 14, and 15 comply with the written description requirement under 35 U.S.C. §112, first paragraph.
- (B) Whether claims 16-19 are anticipated under 35 U.S.C. §102(b) by European

  Patent Application EP0704463 of Ueda et al. ("Ueda").
- (C) Whether claims 16-19 are unpatentable under 35 U.S.C. §103(a) over Ueda.

#### VII. ARGUMENT

(A) Claims 1, 2, 4, 5, 8, 10-12, 14, and 15 comply with the written description requirement under 35 U.S.C. §112, first paragraph.

As outlined in MPEP §2163, there is no *in haec verba* requirement to satisfy the written description requirement under 35 U.S.C. §112, first paragraph. In fact, as outlined in the aforementioned section of the MPEP, "the fundamental factual inquiry is whether the specification conveys with reasonable clarity to those skilled in the art that, as of the filing date sought, applicant was in possession of the invention as now claimed." See *Vas-Cath, Inc.*, 935 F.2d at 1563-64, 19 USPQ2d at 1117. Additionally, it is sufficient to satisfy the written description requirement of 35 U.S.C. 112, first paragraph, insomuch that the specification, "convey clearly to those skilled in the art the information that the applicant has invented the specific subject matter later claimed." See *In re Wertheim*, 541 F.2d 257, 262, 191 U.S.P.Q. 90, 96 (C.C.P.A. 1976), and *In re Ruschig*, 379 F.2d 990, 996, 154 U.S.P.Q. 118, 123 (C.C.P.A. 1967). Furthermore, the disclosure must, "allow one skilled in the art 'to visualize or recognize the identity of' the subject matter purportedly described." See *Koito Mfg Co., Ltd. v. Turn-Key-Tech, LLC*, 381 F.3d 1142, 1154 (Fed. Cir. 2004), quoting *Enzo Biochem, Inc. v. Gen-Probe Inc.*, 323 F.3d 953, 968 (Fed. Cir. 2002).

With respect to whether the currently claimed, "more than 97% . . . by weight of ethylene" in the ethylene/propylene copolymer in Applicants' currently claimed compositions satisfies the written description requirement of 35 U.S.C. §112, first paragraph, Applicants' specification states on page 4, lines 8-11,

The ethylene polymers produced in the second polymerization stage are preferably ethylene copolymers comprising at least 90% by weight, preferably

from 95% to 99.5% by weight of ethylene and no more than 10% by weight, preferably from 0.5% to 5% by weight of comonomers. (Emphasis added)

Therefore, as outlined above, Applicants' specification clearly states the ethylene/propylene copolymer can comprise at least 90% by weight of ethylene, and preferably comprises from 95% to 99.5% by weight of ethylene. This is further supported by the fact that the claims, when filed entering the U.S. national phase, echoed the same ethylene content for the ethylene/propylene copolymer (i.e., at least 90% by weight of ethylene), and were subsequently amended to the latter range of 95% to 99.5% by weight, notably without the Examiner ever questioning whether Applicants' specification satisfied the written description requirement for the ethylene content claimed in either instance. Accordingly, Applicants respectfully believe one skilled in the art would clearly recognize Applicants' specification was in possession of the currently claimed ethylene content range of more than 97% by weight for the ethylene/propylene copolymer at the time of filing, given that Applicants' specification clearly articulates the ethylene/propylene copolymer can comprise at least 90% by weight of ethylene, and preferably from 95% to 99.5% by weight of ethylene. In other words, since one skilled in the art would clearly recognize that the ethylene/propylene copolymer can comprise at least 90% by of ethylene, and preferably comprises from 95% to 99.5% by weight of ethylene, given the explicit disclosure in Applicants' specification, one skilled in the art would clearly recognize that Applicants were in possession of Applicants' currently claimed compositions, wherein the ethylene/propylene copolymer comprises more than 97% by weight of ethylene, at the time of filing.

In fact, as noted *supra*, it is not necessary that the claimed subject matter be described in *ipsis verbis* to satisfy the written description requirement of 35 U.S.C. §112. See *Heymes v. Takaya*, 6 U.S.P.Q.2d 1448 (BPAI 1988), aff'd, 10 U.S.P.Q.2d 1473 (Fed. Cir. 1989).

Additionally, see *In re Wertheim*, 541 F.2d 257, 262, 191 U.S.P.Q. 90, 96 (C.C.P.A. 1976) in which Wertheim narrowed the range of solids concentration of coffee extract to between 35% and 60%, even though Wertheim originally claimed 25-60% and there was no literal support for the newly narrowed range. In fact, the CCPA held that the U.S. Patent and Trademark Office failed to establish a *prima facie* case of noncompliance with the written description requirement even though there was no literal support for the narrowed range.

In light of the facts outlined above, Applicants respectfully believe claims 1, 2, 4, 5, 8, 10-12, and 14-19 satisfy 35 U.S.C. §112, first paragraph, including the written description requirement, and that one of ordinary skill in the art would recognize Applicants were in possession of the currently claimed inventive subject matter at the time of filing.

## (B) Claims 16-19 are not anticipated under 35 U.S.C. §102(b) by Ueda.

As is well-settled, for a reference to anticipate an invention, all of the elements of that invention must be present in the reference. The test for anticipation under section 102 is whether each and every element as set forth in the claims is found, either expressly or inherently, in a single prior art reference. *Verdegaal Bros. V. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must also be arranged as required by the claim. *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990).

With respect to claims 16-19, Applicants are claiming a process for preparing a propylene polymer composition in a two-stage process, and a propylene polymer composition obtained in an at least two-stage process, wherein, in a first polymerization stage, a propylene homopolymer

is prepared by polymerization, and in a second polymerization stage, ethylene and propylene are polymerized to give an ethylene/propylene copolymer comprising from 95% to 99.5% by weight of ethylene, wherein the amount of the ethylene/propylene copolymer in the propylene polymer composition ranges from 10 to 50% by weight, and the propylene polymer composition comprises a melt flow rate, MFR, from 2 to 50 g/10 min. in accordance with ISO 1133 at 230°C and 2.16 kg, and the propylene polymer composition consists essentially of the propylene homopolymer and the ethylene/propylene copolymer.

Additionally, Applicants are claiming a polymer composition and a process for preparing the polymer composition comprising: (1) preparing a propylene polymer composition in a two-stage process, wherein, in a first polymerization stage, a propylene homopolymer is prepared by polymerization, and in a second polymerization stage, ethylene and propylene are polymerized to give an ethylene/propylene copolymer comprising from 95% to 99.5% by weight of ethylene, wherein the amount of the ethylene/propylene copolymer in the propylene polymer composition ranges from 10 to 50% by weight, and the propylene polymer composition comprises a melt flow rate, MFR, from 2 to 50 g/10 min. in accordance with ISO 1133 at 230°C and 2.16 kg; and (2) subsequently mixing an ethylene-C<sub>3</sub>-C<sub>10</sub>-1-alkene copolymer comprising a crystallinity lower than the ethylene/propylene copolymer formed in the second polymerization stage, wherein the polymer composition consists essentially of the propylene homopolymer, the ethylene/propylene copolymer, and the ethylene-C<sub>3</sub>-C<sub>10</sub>-1-alkene copolymer.

In both circumstances, the process and propylene polymer composition consist essentially of either the propylene homopolymer prepared in the first polymerization stage and the ethylene/propylene copolymer comprising 95% to 99.5% by weight of ethylene prepared in the second polymerization stage, or the process and propylene polymer composition consist

essentially of the propylene homopolymer prepared in the first polymerization stage, the ethylene/propylene copolymer comprising 95% to 99.5% by weight of ethylene prepared in the second polymerization stage, and the ethylene- $C_3$ - $C_{10}$ -1-alkene copolymer comprising a crystallinity lower than the ethylene/propylene copolymer formed in the second polymerization stage.

Alternatively, with respect to step (e) in Ueda, which the Examiner is relying upon for the instant rejection, the step (e) is carried out along with steps (a), (b), and (d) to produce a four component polymer product (i.e., a polymer product containing a propylene (co)polymer obtained from step (a); a propylene/olefin copolymer obtained from step (b); an ethylene/olefin copolymer obtained from step (e)). Accordingly, Ueda does not anticipate claims 16-19.

## (C) Claims 16-19 are unpatentable under 35 U.S.C. §103(a) over Ueda.

The U.S. Supreme Court in *Graham v. John Deere Co.*, 148 U.S.P.Q. 459 (1966) held that non-obviousness was determined under §103 by (1) determining the scope and content of the prior art; (2) ascertaining the differences between the prior art and the claims at issue; (3) resolving the level of ordinary skill in the art; and, (4) inquiring as to any objective evidence of non-obviousness. Accordingly, for the Examiner to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP §2142.

With respect to claims 16-19, the process and propylene polymer composition consist essentially of either the propylene homopolymer prepared in the first polymerization stage and the ethylene/propylene copolymer comprising 95% to 99.5% by weight of ethylene prepared in the second polymerization stage, or the process and propylene polymer composition consist essentially of the propylene homopolymer prepared in the first polymerization stage, the ethylene/propylene copolymer comprising 95% to 99.5% by weight of ethylene prepared in the second polymerization stage, and the ethylene-C<sub>3</sub>-C<sub>10</sub>-1-alkene copolymer comprising a crystallinity lower than the ethylene/propylene copolymer formed in the second polymerization stage.

In contrast, with respect to step (e) in Ueda, et al., which the Examiner is relying upon for the instant rejection, step (e) is carried out along with steps (a), (b), and (d) to produce a four component polymer product (i.e., a polymer product containing a propylene (co)polymer obtained from step (a); a propylene/olefin copolymer obtained from step (b); an ethylene/olefin copolymer obtained from step (e)). Additionally, Ueda disclose in [0149],

If the content of the propylene/olefin copolymer (b) is less than 5 % by weight, impact resistance may be reduced, whereas if this content is more than 75 % by weight, heat resistance may be reduced.

Therefore, Ueda clearly elucidate the importance of the propylene/olefin copolymer (b) in the resultant polymer compositions. Accordingly, Applicant respectfully believes one of ordinary skill in the art would not remove the critical propylene/olefin copolymer (b) from the resultant polymer compositions. See MPEP §2141.02 (VI) and §2143.01 (V) and (VI).

#### VIII. CONCLUSION

Appellants respectfully ask the Board of Appeals and Interferences to reconsider and reverse the rejection under 35 U.S.C. 112, first paragraph because the claims comply with the written description requirement, and to reconsider and reverse the Section 103(a) rejection because a prima facie case of obviousness has not been made out.

Respectfully submitted,

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I hereby certify that this Appeal Brief is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Appeal-Briefs-Patents, Commissioner for Patents, P. O. Box 1450, Alexandria, VA

22313-1450 on June 7 ,2010

Date

Signature

### IX. CLAIMS APPENDIX

1. (Rejected): A process for preparing a propylene polymer composition in an at least twostage process, wherein,

in a first polymerization stage, a propylene homopolymer is prepared by polymerization, and

in a second polymerization stage, ethylene and propylene are polymerized to give an ethylene/propylene copolymer comprising more than 97% to 99.5% by weight of ethylene,

wherein the amount of the ethylene/propylene copolymer in the propylene polymer composition ranges from 10 to 50% by weight, and the propylene polymer composition comprises a melt flow rate, MFR, from 2 to 50 g/10 min. in accordance with ISO 1133 at 230°C and 2.16 kg.

- 2. (Rejected): The process as claimed in claim 1, wherein the propylene homopolymer prepared in the first polymerization stage comprises a melt flow rate, MFR, from 5 to 150 g/10 min. in accordance with ISO 1133 at 230°C and 2.16 kg.
- 3. (Cancelled)
- 4. (Rejected): The process as claimed in claim 1, wherein both the first and the second polymerization stages are carried out in gas phase.

- 5. (Rejected): The process as claimed in claim 4, wherein in the first polymerization stage the polymerization is carried out at a pressure from 10 to 50 bar and a temperature from 50 to 100°C, in presence of a polymerization-active catalyst system; the propylene homopolymer obtained in the first polymerization stage together with the catalyst system is introduced into an intermediate vessel, depressurized to less than 5 bar for from 0.01 to 5 minutes and the pressure in the intermediate vessel is then increased from 5 to 60 bar by injection of a gas mixture whose composition differs from the composition of the gas mixture of the first polymerization stage; the propylene homopolymer together with the catalyst is subsequently transferred to the second polymerization stage and further polymerized at a pressure from 10 to 50 bar and a temperature from 50 to 100°C.
- 6. (Cancelled)
- 7. (Cancelled)
- 8. (Rejected): A process for preparing a polymer composition comprising (1) preparing a propylene polymer composition in an at least two-stage process, wherein,

in a first polymerization stage, a propylene homopolymer is prepared by polymerization, and

in a second polymerization stage, ethylene and propylene are polymerized to give an ethylene/propylene copolymer comprising more than 97% to 99.5% by weight of ethylene,

wherein the amount of the ethylene/propylene copolymer in the propylene polymer composition ranges from 10 to 50% by weight, and the propylene polymer composition comprises a melt flow rate, MFR, from 2 to 50 g/10 min. in accordance with ISO 1133 at 230°C and 2.16 kg; and

(2) subsequently mixing an ethylene-C<sub>3</sub>-C<sub>10</sub>-1-alkene copolymer comprising a crystallinity lower than the ethylene/propylene copolymer formed in the second polymerization stage.

# 9. (Cancelled)

10. (Rejected): A propylene polymer composition obtained by an at least two-stage process, wherein,

in a first polymerization stage, a propylene homopolymer is prepared by polymerization, and

in a second polymerization stage, ethylene and propylene are polymerized to give an ethylene/propylene copolymer comprising more than 97% to 99.5% by weight of ethylene,

wherein the amount of the ethylene/propylene copolymer in the propylene polymer composition ranges from 10 to 50% by weight, and the propylene polymer composition comprises a melt flow rate, MFR, from 2 to 50 g/10 min. in accordance with ISO 1133 at 230°C and 2.16 kg.

11. (Rejected): A method for producing films, fibers or moldings comprising extruding or molding a propylene polymer composition to form the films, fibers or moldings, the propylene polymer composition obtained by an at least two-stage process, wherein,

in a first polymerization stage, a propylene homopolymer is prepared by polymerization, and

in a second polymerization stage, ethylene and propylene are polymerized to give an ethylene/propylene copolymer comprising more than 97% to 99.5% by weight of ethylene,

wherein the amount of the ethylene/propylene copolymer in the propylene polymer composition ranges from 10 to 50% by weight, and the propylene polymer composition comprises a melt flow rate, MFR, from 2 to 50 g/10 min. in accordance with ISO 1133 at 230°C and 2.16 kg.

12. (Rejected): A film, fiber or molding comprising a propylene polymer composition, the propylene polymer composition obtained by a process, wherein, the process comprises at least two-stages, and

in a first polymerization stage, a propylene homopolymer is prepared by polymerization, and

in a second polymerization stage, ethylene and propylene are polymerized to give an ethylene/propylene copolymer comprising more than 97% to 99.5% by weight of ethylene; and

wherein the amount of the ethylene/propylene copolymer in the propylene polymer composition ranges from 10 to 50% by weight, and the propylene polymer composition comprises a melt flow rate, MFR, from 2 to 50 g/10 min in accordance with ISO 1133 at 230°C and 2.16 kg.

### 13. (Cancelled)

14. (Rejected): A propylene polymer composition obtained by a process comprising (1) preparing a propylene polymer composition in an at least two-stage process, wherein,

in a first polymerization stage, a propylene homopolymer is prepared by polymerization, and

in a second polymerization stage, ethylene and propylene are polymerized to give an ethylene/propylene copolymer comprising more than 97% to 99.5% by weight of ethylene,

wherein the amount of the ethylene/propylene copolymer in the propylene polymer composition ranges from 10 to 50% by weight, and the propylene polymer composition comprises a melt flow rate, MFR, from 2 to 50 g/10 min. in accordance with ISO 1133 at 230°C and 2.16 kg; and

(2) subsequently mixing an ethylene-C<sub>3</sub>-C<sub>10</sub>-1-alkene copolymer comprising a crystallinity lower than the ethylene/propylene copolymer formed in the second polymerization stage.

15. (Rejected): A film, fiber or molding comprising a propylene polymer composition obtained by a process comprising (1) preparing a propylene polymer composition in an at least two-stage process, wherein,

in a first polymerization stage, a propylene homopolymer is prepared by polymerization, and

in a second polymerization stage, ethylene and propylene are polymerized to give an ethylene/propylene copolymer comprising more than 97% to 99.5% by weight of ethylene,

wherein the amount of the ethylene/propylene copolymer in the propylene polymer composition ranges from 10 to 50% by weight, and the propylene polymer composition comprising a melt flow rate, MFR, from 2 to 50 g/10 min. in accordance with ISO 1133 at 230°C and 2.16 kg; and

- (2) subsequently mixing an ethylene-C<sub>3</sub>-C<sub>10</sub>-1-alkene copolymer comprising a crystallinity lower than the ethylene/propylene copolymer formed in the second polymerization stage.
- 16. (Rejected): A process for preparing a propylene polymer composition in a two-stage process, wherein,

in a first polymerization stage, a propylene homopolymer is prepared by polymerization, and

in a second polymerization stage, ethylene and propylene are polymerized to give an ethylene/propylene copolymer comprising from 95% to 99.5% by weight of ethylene,

wherein the amount of the ethylene/propylene copolymer in the propylene polymer composition ranges from 10 to 50% by weight, and the propylene polymer composition comprises a melt flow rate, MFR, from 2 to 50 g/10 min. in accordance with ISO 1133 at 230°C and 2.16 kg, and the propylene polymer composition consists essentially of the propylene homopolymer and the ethylene/propylene copolymer.

- 17. (Rejected): A process for preparing a polymer composition comprising:
- (1) preparing a propylene polymer composition in a two-stage process, wherein,

in a first polymerization stage, a propylene homopolymer is prepared by polymerization, and

in a second polymerization stage, ethylene and propylene are polymerized to give an ethylene/propylene copolymer comprising from 95% to 99.5% by weight of ethylene, wherein the amount of the ethylene/propylene copolymer in the propylene polymer composition ranges from 10 to 50% by weight, and the propylene polymer composition comprises a melt flow rate, MFR, from 2 to 50 g/10 min. in accordance with ISO 1133 at 230°C and 2.16 kg; and

- (2) subsequently mixing an ethylene-C<sub>3</sub>-C<sub>10</sub>-1-alkene copolymer comprising a crystallinity lower than the ethylene/propylene copolymer formed in the second polymerization stage, wherein the polymer composition consists essentially of the propylene homopolymer, the ethylene/propylene copolymer, and the ethylene-C<sub>3</sub>-C<sub>10</sub>-1-alkene copolymer.
- 18. (Rejected): A propylene polymer composition obtained by a two-stage process, wherein,

in a first polymerization stage, a propylene homopolymer is prepared by polymerization, and

in a second polymerization stage, ethylene and propylene are polymerized to give an ethylene/propylene copolymer comprising from 95% to 99.5% by weight of ethylene, wherein the amount of the ethylene/propylene copolymer in the propylene polymer composition ranges from 10 to 50% by weight, and the propylene polymer composition comprises a melt flow rate, MFR, from 2 to 50 g/10 min. in accordance with ISO 1133 at 230°C and 2.16 kg, and the propylene polymer composition consists essentially of the propylene homopolymer and the ethylene/propylene copolymer.

- 19. (Rejected): A propylene polymer composition obtained by a process comprising:
- (1) preparing a propylene polymer composition in an at least two-stage process, wherein,
  in a first polymerization stage, a propylene homopolymer is prepared by polymerization,
  and

in a second polymerization stage, ethylene and propylene are polymerized to give an ethylene/propylene copolymer comprising from 95% to 99.5% by weight of ethylene, wherein the amount of the ethylene/propylene copolymer in the propylene polymer composition ranges from 10 to 50% by weight, and the propylene polymer composition comprises a melt flow rate, MFR, from 2 to 50 g/10 min. in accordance with ISO 1133 at 230°C and 2.16 kg; and

(2) subsequently mixing an ethylene-C<sub>3</sub>-C<sub>10</sub>-1-alkene copolymer comprising a crystallinity lower than the ethylene/propylene copolymer formed in the second polymerization stage, wherein the

polymer composition consists essentially of the propylene homopolymer, the ethylene/propylene copolymer, and the ethylene- $C_3$ - $C_{10}$ -1-alkene copolymer.

# X. EVIDENCE APPENDIX

Not applicable.

# XI. RELATED PROCEEDINGS APPENDIX

Not applicable.